N.A.C.A. BULLETIN

In Two Sections

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VOL. XXIX, NO. 21 JULY 1, 1948

EDITORIAL DEPARTMENT NOTE

In recognition of their timeliness and constructive character, this issue of the *Bulletin* brings to the full membership the addresses presented at the opening session of the 1948 Cost Conference. The accounting problems posed by price level changes are noted in a brief introduction by the session chairman and are tackled in a concrete manner by both principal speakers. The use of price level indices to measure changes from acquisition costs to current costs, suggested by E. Stewart Freeman writing on the same general theme in the *N. A. C. A. Bulletin* for February 1, 1948, is likewise advocated by the present authors as of basic importance in connection with the revisions in accounting practice which are proposed.

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This *Bulletin* is published semimonthly by the National Association of Cost Accountants, 385 Madison Ave., New York 17, N. Y. Subscription price $10 per year. Entered at the Post Office, New York, N. Y., as second-class matter August 28, 1925, under the Act of March 3, 1879.

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NATIONAL ASSOCIATION OF
COST ACCOUNTANTS

JULY 1, 1948

PRICE LEVEL CHANGES — A CHALLENGE TO ACCOUNTING

INTRODUCTION

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Rapidly rising prices in the last three years, and, to a lesser extent, earlier reductions in the purchasing power of the dollar, make the subject of the two papers which follow of interest particularly to accountants who have responsibility for accurately reporting corporate costs and profits to stockholders, employees, and the public. Interest in the subject is not limited to accountants, however. Many industrial and business leaders have expressed the belief that we are overstating profits in this period. The economists generally think so. Dow Jones' average prices of 9.5 times 1947 earnings may indicate that investors think so, too. On the other hand, neither the U. S. Treasury Department nor labor unions have accused us of overstating profits in this period. Each of these organizations or groups of citizens have their viewpoints and their reasons for taking them.

If we have overstated profits, to put it simply, it is because we have allowed amounts to rest in plant and equipment accounts or in inventory accounts which more appropriately belong in operating costs. I am going to leave it to our speakers of the afternoon to say whether or not we have overstated profits and, if so, how much and the steps to be taken in the future.

I do wish to state that unless we can prepare reports annually which unquestionably disclose to all interested parties the true costs and profits for the year, and unless we can prepare more frequent reports, preferably monthly, which disclose accurate costs and profits to management, our contribution to business and industry is negative. In spite of the fact that reputable publications have recently used terms such as "phony profits," "illusory gains," and "paper profits" when referring to our reports, I am convinced that we have succeeded in getting across a generally re-

liable picture of costs, profits, assets, and liabilities to those who care to study and understand the figures. Nevertheless, we need discussions—such as this—to better understand the viewpoint of each interested group of citizens, to consolidate our thinking, and to improve our techniques. If our concepts have been faulty, we should revise them—with caution, but before it is too late.

The Time For Decision

If we are convinced that price rises realized or contemplated have been great enough to justify a revision of accounting practice, the "overhauling" should not be held in abeyance until prices become stabilized. While in recent months there have been indications of forthcoming stability with an end to rising prices, we are now undergoing a third round of wage increases, with prospects of further price rises. To wait for stabilized price conditions is too long to wait. We should decide now as to what is right.

The extent to which some publications have quoted figures in attempts to prove an overstatement of profits in 1947 may be of interest here. Leaning on the Department of Commerce theory and formula for determining "inventory" profits, two publications I have read reduced corporate income for 1947 from their published figure of $17,400,000,000 to $11,700,000,000. Further shrinkage from increased depreciation mentioned by these and other publications would reduce corporate profit below 50 per cent of the $17,400,000,000 figure.

A fact of more significance is that many annual reports of large corporations for 1947 give evidence of special handling or refer in some way to the problem we are discussing. These reports give attention to depreciation or plant and equipment replacement costs to a greater extent than to inventory "profits." This may merely be an indication that "lifo" is in general use by the larger corporations for valuation of inventory and solves this part of the inventory problem for them. In any event, it would appear that we have a difficult problem on the whole picture which is brought to a focus by the papers of Messrs. Broad and Blackie, which follow this introduction to the general subject.

EFFECTS OF PRICE LEVEL CHANGES ON FINANCIAL STATEMENTS

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THE major developments in accounting during the last fifty years have clearly resulted from changes in economic conditions. The progress of our country from a development or pioneer stage to a more mature economy with adequate capital brought about a change of emphasis from the balance sheet to the income statement. In the early stages shortage of capital and investment for appreciation made the balance sheet relatively more important. It gave the best measure of financial stability and also of the increase in realizable values and these were important psychological factors in investment. Later when capital seeking investment became more abundant and appreciation less important, the value of an investment or a property came to be measured by what it would earn and the income statement came into its own.

Shift of Emphasis to Income Determination

Noteworthy also in our economic development was the growth of the large industrial enterprise, and this was accompanied by the substantial separation of ownership from management. Fair and forthright reporting on stewardship by those who run the business but do not own it to those who own it but do not run it became imperative. Out of this grew a continually increasing demand for objective standards of income measurement and a narrowing of the range of choice as to accounting practices. Cost, being an objective method of measurement and otherwise more useful than value for income determination, became the basis of accounting. The attitude towards conservatism in the balance sheet as a virtue in itself was also changed because undue conservatism prevents the proper matching of costs against revenues and, moreover, could give rise to income statements which are not conservative. Again inconsistency in the application of accounting practice could result in arbitrary equalization of profits and lack of comparability as between years so that today consistency is considered by some

to be even more important than the selection of the accounting practice to be followed.

Thus the major changes in accounting philosophy and accounting emphasis have been directed to more accurate, more objective, and more realistic income determination and in some important respects this has been done at the expense of the balance sheet. The amount of any expenditure properly chargeable against the income of current or past years has been determined, and the remainder has been carried forward in the balance sheet as an asset applicable to future periods. This is the basis on which unamortized bond discount is treated as an asset; it is the basis for our calculations of depreciation or amortization of property, plant, and equipment; and more recently it has been the basis on which the carrying forward of inventories determined by the last-in first-out method has been justified. As a result the balance sheet has reflected to a continually lesser extent the current values of the assets.

Problems Posed by Inflation

Thus departure has been magnified by monetary inflation. The gigantic production and spending and borrowing of World War II have produced economic and social developments of the first magnitude, not the least of which is reflected in the major price level changes of the past few years, particularly 1946 and 1947. As a result of the reduced purchasing power of the dollar, I think we have to recognize that the limitations of financial statements prepared in accordance with generally accepted accounting practices are greater today than they have ever been before in our country. We have to consider how accounting has been affected, what changes have been made, and whether further changes are necessary.

An assumption underlying accounting statements is that the dollar is a reasonably stable unit of measurement, and it has never been considered necessary to recognize changes in its purchasing power.[1] Corporate capital and income have been measured in

[1] *Note, however, the following comment on the "cost principle," taken from "Accounting Principles Underlying Corporate Financial Statements" published by the American Accounting Association in 1941: "It should be applied with enough flexibility to meet business and financial needs under all ordinary circumstances. A marked change in the value of money might impair the usefulness of cost records; however, such changes in price levels as have occurred in this country during the last half century have afforded insufficient reason for the adjustment of asset values."*

dollars without regard to what the dollars would buy when they were paid in or what the income will buy when earned. It is doubtful whether any responsible person thinks that prices are likely to decline permanently to their former level or even within 50 per cent of it. The accounting problems brought by the decline in value of the currency will be with us as long as the accounts continue to reflect prewar dollars. As an indication of how many such dollars are involved, expenditures by manufacturing industries for new construction and producers' durable equipment from 1929 to 1947 are estimated at 125 billion dollars with a current replacement cost of over 200 billion dollars.

Money Income or Economic Income?

We talk about money income and we talk about economic income. The distinction is clear if we look at economic income from the standpoint of the individual. It has been described as what he can spend and still be no worse off at the end of the year than he was at the beginning. Whether he is, of course, will depend for most people largely upon the cost of living during the year. "Real" wages are measured by what they will buy. The lower purchasing power of money forced money wage increases during the war even in those countries which had imposed rigid controls. It has been accepted as the basis of wage negotiations and at least two rounds of wage increases. Sometimes the increases are frankly called "cost of living adjustments." People with restricted incomes have to think of their salaries or wages or investment income in terms of what they will buy, not merely how many dollars are involved. For the individual then it is economic income which counts and not money income.

The concept of a dollar of shifting purchasing power is not a new one but it is becoming one of more practical import and may have to receive increased attention. It seems to be inherent in the settlement of recent wage negotiations between General Motors Corporation and United Auto Workers Union, announced on May 25, 1948. Of an eleven cents an hour wage increase, eight cents is a flexible amount to be adjusted quarterly, upwards or downwards. The adjustments are to be measured by the effect on the basic wage rate of changes in the purchasing power of the dollar measured by the Bureau of Labor Statistics "cost of living index."

An article by Professor Sumner H. Slichter of Harvard University, in the *New York Times* Magazine of May 16, 1948, makes quite an interesting point. He thinks that in view of the increased strength of trade unions, wages in the future are likely to increase faster than output per man hour and that this will force a slow but continued increase in the price level. He points to the adverse effect of this on savings invested in money assets and states that if the decision as a matter of government policy is to accept rising prices rather than interfere with collective bargaining, "pensions and life insurance will have to be adapted to this fact and the Government and corporations will have to issue bonds payable in purchasing power rather than a fixed number of dollars."

For productive enterprise, economic income has been described as the balance of revenue left after making provisions for the cost of replacing materials and equipment used up in earning that revenue. Economic income arises from the *creation* of wealth. In contrast accounting income emphasizes realization; it is founded on cost, not because cost is a truer measure but because income cannot be spent till it is realized and because the recognition of wealth created through real appreciation would create problems so great as to make the objective measurement of income impossible.

Real and Illusory Appreciation

We should recognize that there are two kinds of appreciation. True appreciation is an increase in intrinsic value, actual as well as relative. Boulder Dam is wealth in itself but it also increased the real value of the surrounding territory to which water and electricity became available. A railroad crossed the prairies and the hunting grounds of the Indians became first ranches, later fertile farms, and finally manufacturing communities supporting large cities. The land became more and more valuable as more and more use was made of it.

Another kind of appreciation is more illusory than real. My own home, bought in 1927, declined sharply in selling value in the 1930's but two or three years ago I could have sold it readily for more than I paid for it. But I needed a home to live in and raise my family. If I had sold my house in 1932 and bought an-

other one I would have shown a money loss; if I had done the same in 1946 I would have shown a money profit. I leave it to you to decide whether either transaction would have left me better off or worse off. The point I want to make is that there was no real depreciation or appreciation in the intrinsic value of the house but rather a change in the purchasing power of the dollar in which the sale would have been recorded. As you doubtless know, efforts are being made to get the Federal taxing authorities to recognize the unreality of such profits or losses and eliminate taxes on them.

Impact of Inflation on Business Units

Changing levels of the dollar affect different businesses to different degrees depending upon the nature of their assets and liabilities. An installment finance company which has cash and receivables as its only assets and loans and other payables as its only liabilities will be little affected. Business generally, however, has a mixed aggregate of assets, partly money assets such as cash and receivables, partly property assets in the form of inventories, property, and equipment, and possibly intangibles, and partly assets of a mixed character such as investments. Against these it has liabilities and senior securities which are payable in money, including long-term debt and preferred capital stock, and the excess of the assets over these amounts represents the equity of the common stockholders. When inflation occurs money liabilities and securities can be paid off in cheaper dollars and if they exceed the money assets, the common stockholders benefit, and *vice versa*. On the other hand, to the extent that the common stockholders' equity is represented by inventories and other property assets, there is a hedge against inflation. If the properties increase in money value, the money values behind the stockholders' equity increase too, though the intrinsic values may not be affected.

Inventories

Let us turn our attention to that portion of the common stockholders' equity which is represented by nonmoney assets, particularly inventories and plant and equipment. Let us consider inventories first.

Contrast Between "Fifo" and "Lifo"

We can approach the problem by a comparison of the effect of the first-in first-out (fifo)[2] method and the last-in first-out (lifo) method. Let me illustrate the difference by the example of a shoe merchant and a pair of shoes. The example is shop-worn but it serves to illustrate the point. Our merchant starts the year with a pair of shoes which cost him $5. During the year two or three price advances occur but he always gets enough when he sells one pair to pay his rent and expenses and buy another pair. At the end of the year he has a pair of shoes left but this particular pair cost him $8. He makes up his income statement and if he is on the "fifo" basis he will show a profit of $3 and will owe taxes of, say, $1.00. He reports income of $2.00. If he is on the "lifo" basis he shows the pair of shoes at $5 and no profit and no taxes. This comparison gets us down to the crux of the question: Is the merchant really better off by $2.00 than he was at the beginning of the year? He still has a pair of shoes similar to the one he had to start with but he now owes $1.00 which he did not owe before. Is it better that his profits be measured on this basis, which reflects monetary income, or on the "lifo" basis which allows for the reduced purchasing power of the dollar to the extent that it has been reflected in actual transactions, and thus more nearly reflects economic income?

Some accountants argue that the merchant has made a real profit if he can sell the last pair of shoes for more than he paid for it. But if the increased price of the shoes is reasonably indicative of the reduced purchasing power of the dollar generally, that is, unless the merchant can take his $8 and buy more bread and meat and clothes with it than he could with the $5 at the beginning of the year, it is hard to see how he is better off than he was before. Rather, he now has a debt for taxes which did not exist at the beginning of the year.

Service Performed by Use of "Lifo" Basis

The basis on which "lifo" was originally adopted for tax purposes was that it was a method of limited applicability being suit-

[2] *While comparisons are made of the lifo method with the fifo method, similar comparisons with other methods such as average cost, adjusted standard cost, etc., would be equally valid. These alternatives vary from the fifo method principally in the speed with which they reflect approximate current replacement cost in inventory prices and in profits.*

able only for companies whose inventories consisted to a large extent of homogeneous materials and whose products took a considerable time to manufacture, a limitation which was overruled in 1947 in the *Hutzler Bros.* tax case. The limitation is tied in with the idea that "lifo" is related to the inventory on hand and is an assumption as to the flow of goods. There has been considerable discussion recently whether that is really the basic justification for "lifo" or whether the more tenable position is not that the method is valid because it results in matching current costs with current revenues in the income statement, leaving the residual amount of historical cost to be carried forward in the balance sheet.

Restrictions placed upon the use of the "lifo" method for tax purposes are perhaps necessary for effective administration but nevertheless they are arbitrary and often accidental in their results; and particularly the requirement for an annual cutoff for quantities and prices. As a consequence the "lifo" method in application has moved away in some respects from a sound theoretical basis. It has been criticized on this score and also on the score that due to delays between the date of purchase and the date of sale it may not result in an accurate matching of current replacement cost against current revenues. Despite its imperfections, however, it has served a very useful purpose in that it has excluded from the income statement, to a substantial degree, the effects of price inflation.

The same cannot be said for the first-in first-out method. Increases in inventory unit prices during the year have found their way into profits, and without separate identification. However much we may argue whether or not these increases represent real profits, there is no doubt that they are of a nonrecurring or extraordinary nature. They do not belong in any figure used to judge earning power. The stock market has discounted such monetary profits but it has had to do it without being able to do much more than guess at the amount involved.

Improvements Possible in Application of "Lifo"

There is much yet to be done to improve income accounting under both the "lifo" and "fifo" methods. As to "lifo," perhaps something more akin to the base stock method of valuation, that

is, the application of a uniform price to uniform and normal quantities, is the direction in which we should move. Capital tied up in normal inventories is tied up just as permanently as capital tied up in plant.

Further, if "lifo" is intended roughly to match current costs against current income it seems necessary that there be an extension of the practice of setting up reserves for replacement so as to provide them in all cases of inventory liquidation, voluntary as well as involuntary. At present the practice is common only in cases of involuntary liquidation, and even there has frequently been considered optional. This undoubtedly reflects the influence of tax regulations which in this respect seem to be unduly restrictive. Failure to set up a reserve results in showing as monetary income in one period the results of accumulated price increases on the quantities liquidated, and sometimes corresponding monetary losses later. If there is to be a permanent reduction in quantities below the "lifo" base the need for a reserve for replacement disappears and it then becomes a question of how to disclose, and where to reflect, the monetary gain.

The use of the "lifo" method has resulted in the inventory being stated on the balance sheet at amounts often very substantially less than current replacement cost. The margin is akin to a reserve and it would seem that the rules which require disclosure of the amount and use of reserves should also apply to profits which result from dipping into this margin.

It seems unlikely that any companies which have not heretofore adopted "lifo" for tax purposes will do so now, because of the possibly serious tax disadvantages under present regulations. There is no reason, however, why a company could not, for the purpose of reporting to stockholders, use the "lifo" method (or the base stock method, if that method should meet general approval) without adopting it for tax purposes. A number of companies have already done this because they believe it gives stockholders a more realistic picture of their operating profits. They have accomplished it by setting up a reserve objectively determined by the "lifo" or base stock method.

Plant and Equipment

There are reasons to hope that major price increases are largely behind us. If this is so the problem of monetary profits in income

is also largely behind us so far as inventories are concerned. Price advances have been shown as profits to the extent that they have been reflected in the inventories. They are included in surplus, and taxes have been paid on them.

Those companies which wished to exclude money profits resulting from the reduced purchasing power of the dollar have had available in "lifo" an alternative accounting method in respect of inventories. The same is not true as to plant and equipment. Generally accepted accounting practice requires that charges to income for depreciation or depletion be based on the dollar book figures. Sales, wages, rents, and other income items in current dollars are thus mingled in the income statement with dollars of a different purchasing value. It is like having 100 oranges of revenue and deducting 80 oranges of cost and 10 grapefruit of cost and saying that the profit left is 10 oranges. We have developed no means for measuring grapefruit in terms of oranges. If the grapefruit were tangerines instead perhaps it would not make much difference but when the differential is large enough, we should consider whether it is not worth while to try to find some means—some index—for converting grapefruit into oranges so as to have a standard unit of measurement. There might be debate whether they should be converted on the basis of volume, or vitamins, or juice content. But even an imperfect basis of conversion would be more accurate than the bald assumption that the two are equal.

Whether present dollar value of plant and equipment or the present dollar value of the original dollar cost are reflected in the accounts or not, they are factors which management must take into account in determining price policies if the values behind the stockholders' investment are to be maintained.

The Present Position

In December 1947 the Committee on Accounting Procedure of the American Institute of Accountants issued formally as Research Bulletin No. 33 a statement which had been published the previous October on the subject of "Depreciation and High Costs." This took the position that depreciation should continue to be based on cost; that provision for replacement was a financial problem which management might properly recognize by making annual appropriations of income or surplus; and that an increase of de-

preciation charges would not be "a satisfactory solution at this time." After discussing the formal recording of appraised current values the Committee expressed the view that radical changes in accepted accounting procedure should be deferred until a stable price level would make it practicable for business as a whole to make the change at the same time. Recognition was given to the propriety of accelerated depreciation under certain circumstances.

Generally speaking, this line was held in 1947 financial statements. Despite protests, most corporations conformed and most of those which did not conform received qualified reports from their auditors. Other treatments were adopted however. A few companies charged off immediately what they regarded as excessive cost of current construction, taking the view that such losses occurred when the expenditures were made. One or two other companies increased depreciation charges to reflect in part in current dollars the amortization of expenditures made in dollars of a higher purchasing power. Still other companies adopted the practice of accelerating the depreciation of what they considered to be the excessive cost so as to provide for it over the period during which they expect to receive correspondingly high revenues.

These varying treatments adopted are part of what has been aptly described as a "scatterization of methods." Many appropriations or charges more or less arbitrary in amount and reflecting basically different philosophies were made not only for plant replacement but also for inventory price declines and other purposes. Some were deducted in determining income and more were deducted as appropriations after determining income. There is grave danger that wide variations in practice and the deduction of arbitrary provisions will cast doubt upon the integrity of financial reporting and play into the hands of those who would like to see the private enterprise system discredited and government controls made more far-reaching.

Should We Do Anything About It?

Having reviewed the problems created by price level changes the next step is to consider whether anything further should be done about it in the field of accounting. There is much evidence bearing upon this question.

The U. S. Department of Commerce in its July 1947 Survey of Current Business deducted $4,689 million as an "inventory valuation adjustment" in determining corporate profits for 1946. This represented almost 40 per cent of the amount shown for profits after taxes. The Department's February 1948 Survey dealt with 1947 profits, estimated as to the last quarter of the year. It stated: "in judging the level of profits in the context of the general economic situation the data must be interpreted carefully. In the first place, the figure of 29 billion (before taxes) includes 6 billion which reflects higher unit costs of inventories. Had corporations charged the same sales prices, but had it been the universal practice to charge to expense the amounts needed to replace the physical volume of inventories used up in production rather than their money value, corporate profits would have been 6 billion lower. This latter total of 23 billion is the figure reflected by the item 'corporate profits and inventory valuation adjustment' in table 1." The Department of Commerce is doing something about it. (It should be noted in passing that the taxes paid on the 6 billion dollars of money profits are similar to the $2 of taxes payable by our hypothetical shoe merchant if he reported income on the first-in first-out basis.)

Interest of the Stock Exchange in Better Reporting of Income

The New York Stock Exchange is also giving serious attention to the problem. In an article published recently, John Haskell, Vice President of the Exchange, refers to the "illusory phases" of current corporation profits and states that "by and large, it appears that the total profits of all American companies for 1947 would be just about half of the amount reported on a monetary dollar basis, if correction were made to eliminate the distortions caused by increased price levels in inventory and depreciation figures. There is a pressing need for a generally accepted accounting method of dealing with the problem of reporting earnings in dollars of varying value. In the meantime current company earnings reports should be carefully appraised to allow for the illusory profits caused by the violent rise in price levels in recent years." Through Mr. Haskell the Exchange has formally offered the accounting profession its cooperation and assistance in seeking a solution.

The general subject of profits and the illusory nature of currently reported earnings has also received considerable notice in the press. Editorial comments, some of them quite critical in tone, have appeared in many of the leading metropolitan papers, with even more discussion in the financial press. Technical economic and accounting magazines have been full of it. Many comments have also appeared in published annual reports to stockholders. In reading these one cannot but be struck by the frequency with which the subject of depreciation and replacement is dealt with and the prominence given to it in many presidents' reports. The president of one major company devoted half of his entire letter to it. Most of the discussion centers around the financial problems involved in replacement of plant and the need to retain profits. In some cases there is comment, occasionally critical, on the failure of accounting methods to reflect this. One president stated in effect that if the costs of construction declined the money spent in 1947 would result in a loss; that if they did not decline the charges against income for depreciation were inadequate; and that in either event a reserve was necessary.

What To Do About It?

This challenge from so many sources cannot be waved aside. We are left with the question of how to meet it. There is wide divergence of opinion on this point, not only among practicing certified public accountants but also among controllers and other financial executives. The Committee on Accounting Procedure of the American Institute of Accountants has had the question under intensive consideration but has reached no conclusion. Accordingly, any comments which I make on this point should be considered solely as my own personal views.

Personally, I think we are faced with a very important and far-reaching problem. One of our basic assumptions, the reasonable stability of the monetary unit, has failed us. We are at a crossroads. We may conclude that we will best attain our objective of making accounting statements useful by continuing straight along the same road, despite opposition and road-blocks in the way. We may decide that the perils of a change of course are greater than any advantages to be claimed for it. But as accountants we cannot just stand aside and say there is no decision to be made.

Solutions Which Have Been Offered

Various roads are open. Economic adjustments following World War I resulted in the appraisal write-ups of the 1920's and the write-downs of the 1930's. This solution brought as many new problems as it solved and its imperfections have led most of us who went through those eras to say, "Never again!" With this experience some accountants would prefer to continue to reflect monetary profits and believe that changes in the purchasing power of the dollar are not material or significant enough to warrant any major change. They believe that the imperfections of any method which attempts to isolate the effect of such changes outweigh whatever advantages it offers.

Another group suggests that the formal statements should continue as heretofore to reflect monetary income but that they be accompanied by supplementary data. If such supplementary data is to be separate and apart from the formal financial statements, however, this is not an adequate solution. If the formal statements require to be supplemented and interpreted, means should be found for doing it in the statements themselves. Otherwise we would have two standards of reporting.

Other accountants think that statements which reflect monetary income alone are inadequate and that where the discrepancy from real earning power is material and significant it should receive positive treatment. One suggestion is that there be an extension of the quasi, or informal, reorganization procedure under which a corporation would in effect make a fresh start with revised figures for plant and inventories on which future income charges would be based without, however, any requirement for freezing or capitalizing the earned surplus. The difficulty with this is that it would permanently freeze the present level of prices into the accounts without any assurance that the level will remain constant. It is doubtful whether such a solution would be acceptable to businessmen.

Another proposal is the adoption with respect to depreciation of plant and equipment of something akin to what has been done by the use of the "lifo" method for cost of sales. The method can be clarified by using a company producing crude oil as an illustration. Let us suppose the company spent $5,000,000 in drilling in 1947 and brought in new wells which increased its developed

reserves by 10 million barrels, or at an overall cost of 50 cents a barrel. If the company had also produced and sold 10 million barrels in 1947 the $5,000,000 spent in that year would be the charge for depreciation or depletion of oil wells. If more oil were sold the excess would be charged out on the basis of 1946 costs. If less oil were sold, 50 cents a barrel would be charged out and the difference carried forward as an asset. In either event only the increase or decrease in developed reserves, i.e., productive capacity, would affect the cost of wells carried forward.

An objection raised to this method is that it could not be applied generally because plant and equipment and production therefrom are rarely homogeneous in character and are seldom replaced by like items. There are major difficulties in the way of general application but the idea has its attractiveness. What investors are interested in, what a healthy economy requires, is not that the identical plant be replaced but that productive capacity, and consequently earning power, be maintained. Unless this is done wealth has declined.

"Index Depreciation" on Adjusted Original Cost

Approval for tax purposes of the use of index numbers in the application of "lifo" to the widely varied inventories of retail stores points to one further suggestion which perhaps opens up the best prospect of a useful and workable solution. It is that depreciation charges based on original cost be converted to current dollars by means of a formula. Price index numbers would be established for each year on the basis of a norm, say 1939 or some other year or period of years. Plant and equipment would be analyzed according to the years in which the expenditures were made, going back a sufficient number of years to account for at least the bulk of the assets. The relative index figures would be used to convert the depreciation charges in respect of each year's expenditures into terms of the current year's dollar.

Except for the establishment of reasonably reliable index figures no difficult accounting or mathematical task is involved. The plan has been worked out for a few companies experimentally, using various index figures, such as cost of living, wholesale commodities prices, construction costs, etc., and an average of several of them. The results vary within a reasonably narrow range.

With further refinement the result undoubtedly could be improved; and even an imperfect tool is better than no tool at all.

It would of course be oversimplifying the situation to infer that all changes in price levels result from a reduction in the purchasing power of the dollar. Goods in short supply will always command a relatively higher price than goods which are plentiful. The indices for general construction and for machinery and equipment costs have both shown greater advances than the cost of living index. These may include excess costs arising from other causes to which I shall refer later.

Personally, I would not regard the use of an index related to the purchasing power of the dollar as a departure from the cost basis. To my mind it would merely be the measurement in current dollars of the actual dollars expended at a time when they would purchase more. It is the dollars themselves that have changed, not the costs. The strongest argument for cost as a more useful basis than value for accounting purposes is that it provides an objective basis for measurement and minimizes the need for subjective opinion. The same merit can be claimed for the index method.

Some accountants have suggested that it would be futile to apply an adjustment in respect of depreciation charges, because unless adjustments were made similarly to convert to current values the payments for interest, rents, and other charges under long-term contracts, the result shown would not reflect economic income in any event. The two classes of transactions are not comparable, however. They differ in that payments for interest and rent are actually made in current dollars and if they are below current value the corporation actually does benefit. An inflationary profit may be involved but it is nevertheless a realized one. This applies, too, to funded debt or other borrowed money which may have been invested in plant and equipment. In contrast, plant expenditures in respect of which depreciation costs are computed were not made in current dollars, but in dollars of a higher purchasing value.

Related Problems

Should it be decided that the index number method or some variant of it offers an acceptable solution, questions involved in

its application immediately arise. First, should it be applied to the asset accounts as well as to certain figures in income statements? And if not, how should any adjustment be reflected? Second, should it be regarded as a permissive method or mandatory for all cases and, if adopted, should it be applied consistently in the future?

Asset Amounts Need Not Be Affected

As to the first question, if the reasoning supporting the method is valid, there is no doubt that it would be theoretically sound to go all the way. This would lead us along the course adopted in Germany, France, and Italy following revaluation of their currencies. I do not think we need to go as far as that. I would prefer, at least for the present, to see use of the method limited to the income statement, and to the objective of showing revenues and costs in monetary units of equal value. The balance sheet could continue to be regarded primarily as a historical accounting for management's stewardship of the stockholders' investment. However, there might well be shown parenthetically the current dollar equivalent of "lifo" inventories (or their current market or replacement cost); and also the pertinent figures on which depreciation was being calculated, i.e., the original money cost of the plant measured in current dollars. The increased provisions accumulated for depreciation and any other similar adjustments could be included as a special item in the equity capital section. To an extent, at least, they would help to maintain the real value of the dollars which were originally paid in as capital.

Forced Uniformity of Practice Undesirable

The second question is whether adjustment should be regarded as permissive or mandatory. Obviously, neither the accounting profession nor business itself has legislative powers. If the idea has merit and should receive public acceptance, public opinion and the demand for informative reporting would gradually bring about its adoption. In the meantime, it would be clear which companies adopted it and which did not. The problem is one of varying intensity with different businesses, depending on the relative importance of the depreciation charge. Whether it is worth while to try to convert grapefruit into oranges depends to some extent

on how many grapefruit there are. Those with only one or two grapefruit might well decide to wait and see whether an accepted yardstick is found.

Uniformity may be a desirable objective but insistence on uniformity at the outset will tend to restrict progress. Even with semilegislative powers the Securities and Exchange Commission has not considered it necessary in its accounting regulations for investment trusts to insist upon uniformity. It permits two alternative methods for showing investments, their principal asset: either cost, with value shown parenthetically; or value, with cost shown parenthetically. The "lifo" method for inventories is not used uniformly; only as a permissive method has it attained its present status.

Consistency of Application Important

On the other hand, it is well to remember that one of the most valuable uses of income statements is to compare results and progress of an individual company from year to year and also to compare the results of different companies in the same industry. Ready comparability is thus a major objective of income statements if they are to be as useful as possible. Consistency in accounting practice is essential to a comparison of one year's results with another's. The comparison would be meaningless if depreciation charges were increased 50 per cent based on an index calculation one year and reverted to the basis of original dollar cost the next. The suggested practice, if adopted, should be consistently followed.

Comparability of results as between companies has undoubtedly been reduced in recent years by the adoption of the "lifo" method for inventories by some companies but not by others. It would be reduced further if some companies should adjust their depreciation charges while others do not. To afford ready means of comparison it thus seems important for adjustments of this nature to be disclosed clearly by companies making them. There is much to be said for a form of statement which first brings down the income on the basis of historical money costs and then shows the adjustments which have resulted from the adoption of an alternative, but fundamentally different, accounting policy which is not universally adopted. This is as desirable in the case of the "lifo"

method for inventories as it is in the case of adjustment of depreciation charges. If profits or losses resulting from changes in price levels can be segregated the yield of the business in operating profits will be more clearly shown. Such profits are what the stockholder really invests his money for.

There are other problems related to the determination of an adequate depreciation charge against income but time does not permit more than passing mention of them. Few companies adopted the recommendation of the Committee on Accounting Procedure that fully amortized war facilities, if material, should be restated in the accounts so that future earnings would bear a reasonable depreciation charge. Perhaps this situation should be corrected.

Again, when facilities are required at costs believed to be excessive instead of waiting for more normal conditions, it must be assumed that the management foresees potential benefits in the interim greater than the added costs. In such circumstances, the theory of matching costs against related revenues would seem to justify a speedier writing off of the excess costs so as to apply them against the short-term gains expected to be realized.

Summary

The point of view I have presented can be summarized as follows:

1. Conventional accounting reflects money income but when prices have changed rapidly it may fail by a substantial margin to reflect economic income, because some of the costs are measured in current dollars while other costs are measured in dollars of a different time, and therefore a considerably different value.
2. Accounting has partially recognized this by approving the "lifo" method for inventories, but has approved no corresponding adjustment for depreciation of plant and equipment.
3. Such an adjustment is desirable in income statements if they are to be as useful as possible, but it should be made by some method which is subject to objective measurement—not arbitrary.
4. The use of an index method to convert depreciation charges based on past expenditures to current dollars

would meet this test and is the most practicable and simple method yet suggested.

5. Uniformity may be desirable but insistence on uniformity should not be allowed to hamper progress. However, ready comparability is essential. If a changed method of depreciation is adopted it should be followed consistently and in order to provide comparability of results of different companies it is desirable that the effects of the "lifo" and "fifo" inventory methods and of alternative depreciation methods be isolated, and shown up clearly in the financial statements.

Conclusion

The problems created by price level changes are important from an accounting standpoint, but there are other phases even more far-reaching. Accounting emphasis on historical costs has had economic and social effects of major importance. I have already mentioned the 6 billion dollars which the Department of Commerce *deducted* from business income for 1947 as an inventory valuation adjustment. For the years 1930 and 1931 an estimated 7 billion dollars was *added*. The adjustments were the other way around and would have increased by over 50 per cent the aggregate business income before taxes reported for those two years.

To return to our shoe merchant, if he were on the "lifo" basis instead of a "fifo" basis he would be more reluctant to stock up on $8 shoes in a period of rising prices, unless he felt he could turn them over at a profit. If he could not sell them they would be carried at $5 and he would not want to show the loss. Conversely, in a falling market he might be encouraged to cut his prices and make sales if current cost would give him a profit. Regardless of how desirable a transaction may be, there is a strong psychological reluctance to enter into it if it will show a loss.

The depression of the early 1930's was deepened by an unwillingness to reflect the inventory losses which would have to be taken under the historical cost method if selling prices were drastically reduced. When prices decline, to avoid showing the loss we put off selling at prices sufficiently low to create demand, and we put off buying for lack of markets. Lower selling prices based on lower replacement costs should promote more sales. Dollar sales might fall. Real national income, however, is not measured

by dollar sales but by productivity. If in accounting for inventories and depreciation we could approach more closely the economic view of income as what is left over from revenues after providing for replacement of goods and services consumed we would change these psychological factors. Encouragement to maintain or increase inventories would be lessened when prices are advancing. There would be encouragement to produce and sell at lower prices when cost of replacement falls. This could not fail to have an effect in stabilizing employment. Peaks and valleys of profits would be less sharp. Government revenues would be stabilized, too.

Recognition and measurement in financial statements of the effects of price level changes can, I think, be supported by sound accounting and economic theory. Even more important, it can be justified as serving a useful social purpose.

COMING ARTICLES

In the *N. A. C.A. Bulletin*, July 15, 1948

Cost Control—A Review of Techniques
by Clarence B. Nickerson

The Critical Areas of Material Cost Control
by I. Wayne Keller

A Stores Control Procedure
by F. W. Berry

Daily Reports to Control Assembly Labor Time and Costs
by John G. Goettee

WHAT IS ACCOUNTING ACCOUNTING FOR — NOW?

A consideration of the nature and measurement of business capital and income in a changing price economy

by WILLIAM BLACKIE,

Vice President, Caterpillar Tractor Co.,
Peoria, Ill.

PERHAPS the most attractive feature of accounting is that, like every other art, it can be counted on to break out every once in awhile into something new and infectious. Sometimes it is just intellectual exercise; sometimes it is a sort of brief fad; sometimes it transpires to be something good for permanent incorporation in the impermanence of accounting.

One of these eruptions is occurring now—and it calls for the usual contemplation—accompanied by the usual suspicions and hopes.

This most recent occurrence treats of the fact that price levels—and, therefore, the value of money—are not a stable constant. Such a condition is, of course, far from new—but the effects of the condition upon accounting results are held to be more dangerous this time than they have been in the past. It is, apparently, not just a case of somebody's ox being newly gored, but rather of its being gored more than it used to be.

In such circumstances, some kind of action is clearly to be expected—not necessarily from the altruistic motive of improving accounting, but from the more important motive of ensuring that accounting does not prevent the doing of what is good—with "good," of course, as reinterpreted in the light of new need or stronger desire. And since the present outbreak is inspired by something old rather than something new it seems fitting that, in at least one of the attempts to tackle it, the approach be made through a reconsideration of what accounting is accounting for. In doing so it will be appreciated that circumstances alter cases, and that patterns of thought change with the times. Even concepts of good and bad change with the ages.

All of the major uses of accounting are important, but if any one of them were to be deemed more important than the others it would surely still be that one which gave accounting its genesis

—stewardship. Accounting not only existed without the other uses which were developed later, but served its then purpose well; and, if anything, its original reason for being has become more important, rather than less—at least in those environments where private capitalism has prospered or survived. And if this be so, the problem then turns largely on what it is that is entrusted to the stewards and has to be accounted for by them.

In very early times it might have been bronze (for weapons), gold (for ornamentation), skins, cloth, or salt; later it might have been jade, amber, pearls, spices (to make the bad food of our forefathers more palatable), or perfumes (to make their unwashed bodies more fragrant). Later still it might have been cattle (used by primitive peoples and by the Zulus and Kaffirs of today as a standard of value), or tobacco (which was legal tender in the colonial days of North America). In even more recent, more civilized times it might have been gin, whiskey, guns, or slaves. With, however, the development of greater trade, division of labor, changed moralities, and, eventually, mass production, all of these richly interesting things became more and more just the subjects of good old stories—or, nowadays, bad new "movies"—and less and less the properties entrusted to the stewards of business. Something new had been added to lubricate the way of life—pieces of eight and pieces of paper called "money" which people accepted as mediums of exchange and as denominators of value. To a surprisingly large extent this money became not only a temporary store of exchange power between transactions within the short term, but also a reservoir of much greater power which could be accumulated for release after relatively long periods. And it could, too, be accumulated beyond the immediate needs of the successful savers to the point where they had more money than they could actually use profitably—themselves. But others without so much money were available and willing to have their talents employed in productive use of the otherwise idle savings. And so evolved private capital enterprise as it is today, and as it is thought of in this contemplation of the meaning of accounting.

This background material is not presented for mere entertainment purposes. It is designed to provide a possible lead towards answering the question which prompted it: What are the stewards who account accounting for?

Accounting for Money or Capital?

Is it *money,* in the sense of a commodity to be loaned or invested—and to be measured on a scale of numerical quantity? Or is it *capital,* in the sense (ascribed by Webster to later economists) of "an aggregation of economic goods used to promote the production of other goods, instead of being valuable solely for purposes of immediate enjoyment"—and to be measured on a scale of the "real" value of money expressed in terms of its purchasing power.

If it is the former—legal money—then the generally accepted historical method of adding revenues and (with a certain degree of art) deducting costs—with costs determined as original expenditures turned over on a first-in, first-out basis—will produce a reasonably logical accounting for the quantities of money entrusted to the stewardship. It will report how many pieces of money were received, how many were disbursed, and how many were left. And provided it were to be interpreted with an illuminating insight which would recognize exactly what is and is not being reported, this method could probably be used with reasonable success for both managerial and stewardship purposes. Such requisite insight seems, however, to be the acquired faculty possessed only by those having whatever it takes to make an accountant—and for one reason or another (generally good) most people are not accountants. While the results of conventional money accounting may, therefore, be of some interest as the products of accountants, by accountants, for accountants, they are of little or no value to the people who matter. Accountants seldom provide the funds for business; in general, they play only a limited part in business management; and their income is little affected by the results of accounting as such. It is not, therefore, very important what accountants happen to think when they step back to admire the product of their art. The important thing is that the people for whom accounting is alleged to be rendering its service do not understand what they are getting, and, if the two are to be brought into consonance, then unchanging continuance of present accounting practices would seem to call for change in the people. That this latter improbability is the alternative to a change in accounting has been optimistically recognized by Howard Greer in the following terms: "The correct solution of this problem lies in the education of the public in the problems of business economics and

the way in which they are affected by fluctuations in money values. This requires not a revision of accounting statements but a thorough exposition of their significance as stated."[1]

On the other hand, if accounting is accounting for "capital" (as defined), then something new would seem not only to be desired, but actually to be needed.

This paper attempts, accordingly, to contemplate this latter possibility, and to do so by offering some thoughts which might be pertinent on:

the nature of the problem and an approach to its solution;
inventories;
capital assets;
price change capital;
accounting change.

The Nature of the Problem and an Approach to Its Solution

For the purpose of

1. accounting for business capital (as defined)
   in such a manner as to permit of
2. the determination of
   (a) business income
   as distinguished from
   (b) the effects of change in price levels

   and, at the same time, provide
3. means for the recording of business transactions in such a system as will produce results capable of being reported and usefully interpreted,

   there is needed
4. a standard of constancy resting on some medium having some form of common denominator through which different types of transactions in different types of goods and services[2] can be measured, related, and coordinated.

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[1] *Vice President and General Manager of Kingan & Co. in "Depreciation and the Price Level," The Accounting Review, April 1948, p. 131.*

[2] *Hereinafter this paper deals with the subject only in relation to goods. Insofar as they do not involve inventories, services will generally represent a less complicated problem.*

The only practical medium available for the satisfaction of such purpose and need is the standard of measurement of value used throughout business transactions involving the exchange of goods at a price. This standard is the medium of exchange—money.

But the quantity of money which exchanges *at one time* for certain goods does not exchange *at another time* for the same goods

or, conversely

goods which exchange *at one time* for a certain quantity of money do not exchange *at another time* for the *same* quantity of money.

Money as represented by the quantity of monetary units involved in any particular transaction does not, therefore, provide the constancy necessary for a standard of measurement which deals with *values* in continuing business exchange

and

the underlying reasons for the absence of constancy lie in the dimension of *time—in the changes which occur during the calendar interval between different exchanges of the same goods.*

If, then, it be accepted that, in the absence of any constant standard of value, money is the best available standard of measurement for the given purpose, an indicated means of satisfying the given purpose and need appears to lie in a translation of—

(a) the actual original quantities of money by which the values of goods were measured in (past) exchange transactions at different (earlier) times

into

(b) different quantities of the same kind of money as of *one and the same time*—being, generally, the time of later exchange transaction in the same goods (though not necessarily in the same form) or the time of a financial determination between transactions in such goods.

The means for this translation lies in the relationship which money bears at the selected time to the quantitative and qualitative constant represented by the goods involved in the exchange.

By applying to the actual quantity of money involved at the time of the original exchange the factor of the degree of change from that time to the later time of subsequent transaction or finan-

cial determination there may be ascertained *in terms of the "real" value or "purchasing power" of money as of that one time* both—

(a) the capital employed in the business and its deployment (being the "financial position" of the enterprise),

and

(b) the change therein over the period (being the results of its operations and the effects of changes in price levels for the period).

INVENTORIES

Inasmuch as the problem deals with things which change in money value as measured by price, there may be excluded from consideration such components of the financial position as money itself, in the form of cash (which is always "current"), and receivables and liabilities, in the form of obligations to accept or pay in settlement of previous commitments stipulated quantities of money (of current value on the due date) without regard to whether the purchasing power of such money shall or shall not remain constant between time of creation of the obligation and time of its discharge. The obligation to accept or pay the specified sums of money may be incurred at one price level and be discharged at another; but the change in the purchasing power of the money is not causative of change in the amounts of money involved.

The problem being considered lies, therefore,—and rightly so since it rests in the dimension of time—in those costs which are carried over from one period to another as short-term and long-term charges against *future* operations, identified, respectively, as (a) inventories of goods to be sold, and (b) capital assets to be consumed (with the exception of land) through operation of the enterprise as a going concern without limitation as to the length of life.[3]

Implications of "Cost or Market" and "Lifo" Bases

In general, the precepts, postulates, and principles of "generally accepted" accounting treat of costs as being the original costs

[3] *Deferred charges are, for this purpose, of the same general nature as inventories but are not considered because of their relative unimportance.*

actually incurred in actual transactions. There are, however, certain exceptions in certain circumstances, and in the case of inventories the existence of the "cost *or* market" exception to consistent application of the original cost principle is of significance for this discussion in that it recognizes one, and only one, aspect of the changing value of money by requiring that something be done about it when costs (or price levels) *decline*. Perhaps as a result of this one-sided inconsistency, emergence of the problem on the converse was inevitable—when costs (or price levels) *rise*.

Out of this other side of the problem there developed (on argument based upon "fungible" petroleum) a general acceptance of the older idea of "last-in, first-out" as a device of inventory accounting which, from the viewpoint of periodical income determination, offered the appearance of a rational process eliminating some of the undesired effects of first-in, first-out accounting when prices rise.

The "lifo" device, however, creates the anomalous condition that, as inventories become more (or less) "valuable"—in a current money-price sense—through the movement of replacement costs above (or below) residual carrying amounts, these amounts become increasingly disproportionate relative to such costs. These aggregate carrying amounts are, furthermore, comprised of a heterogeneous collection of first-in costs as of a variety of earlier dates which, since it represents neither recent original cost nor replacement market—nor any other acceptable criterion of valuation —has no interpretable significance. In so far as it destroys the homogeneity of the underlying computations, the device, therefore, seriously impairs, even if it does not wholly destroy, the purposes of making a determination of the financial position.

Nevertheless—and especially if it be accepted that accounting is empirical, being largely the rationalization of prudent and constructive practice evolved through experience—it has to be recognized that "last-in, first-out" is being found in certain circumstances (not yet, however, widely tested over a full economic cycle) to serve a useful purpose. At this early stage of its development it is, accordingly, appropriate to inquire not only whether the "lifo" device may be merely an expedient of the times, *but also whether it might not be the incomplete extrapolation of an idea having basic merit.*

As mental conditioning for such inquiry it might not be inappropriate to recall to mind that the practices and, often, the beliefs men live by are sometimes more the product of desire than of intellectual adherence to principle. This, however, does not mean that such practices or beliefs are necessarily bad. Far from it! Often they serve well extremely worthy purposes; and their apparent lack of correlation with provable fundamental truth frequently lies only in the immaturity of man's knowledge—in the inability of man to discern what *is*. In such circumstances the underlying idea must, nevertheless, have a basis in rational thought, and the justification for even an accounting convention cannot be merely that its results are "desired".

Toward a Common Price Level for Sales and Related Costs

The underlying "theory" adduced for support of the "lifo" device is, or was, held out to rest—and so the paradoxically seductive title of the device would indicate—on an assumption as to a flow of goods (or, presumably, rather as to a flow of costs attaching to goods) in which the last shall be first and the first shall be last. As a theory, it does not—and is not claimed to—rest on fact; but as a practical answer to a felt need it is held to have its foundation substantially in the facts (1) that, to keep a concern "going", its inventories have to be replaced, (2) that the replacement inventories have to be acquired at replacement costs, and (3) that, to whatever extent they have to be used to replace inventories sold, cash increments from their sale are not available for other purposes.

The condition which brought the facts actively to the fore was, of course, rising price levels; and the effect desired was the very practical one of not paying out in taxes or distributions of profit (or, later, in "ability-to-pay" wages) "paper" gains which (a) were not available for disbursement in cash, and (b) could be wiped out in a reversal of the price trend. Any such later reversal was, in fact, held to be—and may well be—a consequence of the earlier trend.

In these circumstances the way to achieve the desired effect was found to lie in getting rid first of the later higher costs of inventory additions, thereby leaving in the residual pile the earlier lower costs. The justification for the innovation would, however, have

appeared too crude in these terms, and by a nicety of rationalization the device emerged as a fairly respectable method for matching "current inventory costs against current revenues."

"Last-in" cost, however, is only "current" or contemporaneous with its corresponding sales price revenue to the extent to which —by the relative brevity of the time lag—it may be held to be an *approximation* of "current" market (replacement) cost as of the time of sale. And if this be so, then the underlying "principle" of the device must lie, not in the *assumption* that the goods last acquired *were* first sold, but in the *fact* that their costs represent the actual expenditures *nearest in time* to the time of sale—and are, therefore, *the closest actual costs in point of time to current costs as of the time of sale.*

On this basis, the real justification for "lifo" would be that it *approaches* a current cost basis, and thus produces the approximation of a coordinated relationship between sale and acquisition *on one common price level.*

If this be the case, whatever grounds there may be for support of "last-in, first-out" on a "matching" basis would be even more applicable to a case for carrying the theory the whole way to *current cost as of the time of determination.* In this way the degree of approximation in the matching of costs and revenues would be eliminated and there would be provided, not only a means for the determination of income—distinguished in accordance with the requirements of the problem—but also a means for presentation of the inventory as a homogeneous component of the financial position on an accounting basis susceptible of interpretation.

Replacement Cost Employed to Derive Current Money Value

Note particularly, however, that the very essence of justification for such an idea lies, not in the fact that the inventories have to be replaced, but in that "matching" of current revenues with current costs which "lifo" approaches but fails to reach. It is of no importance whether the inventories are or are not to be replaced. *The theory being explored is not a replacement cost theory. It is a current money value theory, and market replacement cost is only a convenient device for the conversion of original cost to current cost.* This should be thoroughly understood throughout the

course of this discussion—even though the results may be similar under either theory.

As to how, within the spirit of this contemplation, current cost levels might be used as a basis for inventory accounting, it may be noted that, in the case of inventories, the process or technique would be no different than that now employed when inventory amounts are reduced from higher costs to lower "markets" on a "cost or market" basis. If replacement "market" can successfully be ascertained and used when price levels decline, it can successfully be ascertained and used when they rise; and just as, under existing practice, better techniques should and can be developed for making this type of adjustment more easily adaptable to a continuous process (rather than an "extraordinary" occurrence), so also could the same techniques be employed to determine and reflect adjustment for the difference between original costs and current costs, or between earlier and later replacement costs. Sales revenues could then be charged with the related current costs in a continuous and consistent matching of revenues with the appropriate contemporaneous costs *on one common plane of current money value.*

Capital Assets

In the case of so-called capital assets (with the exception of land, which is discussed later), the operation is one of consumption, exhaustion, and loss of economic worth through usage or obsolescence rather than, as with inventories, one of transfer and exchange of economic value through direct purchase and sale. In the former instance there is no contractual *quid pro quo* for the disposition—which would occur through the passing of time even if not through usage. In the latter instance a contractual consideration is the very essence of the disposition.

And since the process of disposition of capital assets is gradual, rather than instant (as by sale), it has become fairly general practice for their loss of economic worth to be recognized by systematic amortization over their economic life through some form of "depreciation" accounting under which periodic installments of the loss are determined on the basis of either time or output. On a strictly time basis, the amortization charges are made without regard to the revenue-producing activities or proclivities of the as-

sets; and on a strictly output basis, the fact that the assets will not produce output regularly over all of their lives is taken into account in establishment of the amortization rates.

The essence of the problem in so far as it relates to depreciable capital assets lies, therefore, not so much in their existence as a component of the total accounting position as it does in their consumption, exhaustion, or loss as a factor in the determination of periodical business income."[4]

Current Money Cost of the Original Investment

In the terms of the proposition being examined, however, what is it that is being consumed, exhausted, lost as buildings, machinery, and equipment pass from the productive vigor of efficiency and utility to the decadence of obsolescence and uselessness? Is it a pot of legal money filled to some level set by the happenstance of original cost? Or is it economic capital tied up for the time in certain types of physical property? Under the conditions of the problem being examined, it is being deemed to be the latter; and if it is, then depreciation accounting as an integral part of the accounting for capital investment would have to deal, not with cost as it happened to be incurred by design or accident at the time of its incidence, but with the current money cost of the original investment from time to time as it wastes away.[5]

As to the means for measurement of current money cost, as construed, there could be room for opinion; but as a practical matter, it seems reasonable to expect that appropriately constructed price indexes would best serve the purpose.[6] Assets of the type being considered are not generally being made, bought, or sold as duplicates of original assets, nor are they generally being traded on open markets providing frequency of price quotation. The basic components of which such assets are comprised are, however, so bought and sold, and all that would seem to be needed for construction of the appropriate indexes are (1) the desire—prompted, as usual, by the incentive of receiving benefit in return—and (2)

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[4] *Question as to the propriety of prevalent depreciation* METHODS *is being carefully avoided here.*

[5] *As to how this might be done, reference may be made to the illustrative example in Exhibit 1.*

[6] *It is of interest to note here that the use of price indexes is already in operation as a technique for "lifo" inventory purposes in accordance with both generally accepted principles of accounting and federal income tax law.*

the interpretation of "appropriate" as here used. (The first of these is perhaps contingent upon the second.)

General Price Index Inadequate

Appropriateness, for the purpose, would appear to turn on whether the measurement of business capital is conceived in terms of (a) one general over-all real value of money or (b) different money values applicable to each of the several segments of capital invested, for the time, in the different types of components of the whole capital (which can, of course, be neither greater nor less than the sum of the parts). If it is conceived in terms of the former, then appropriateness in the index would seem to call for some kind of general index of the value or power of money to purchase the whole gamut of goods and services purchased by all purchasers for all purposes. But can there really be—as a usable tool—such a general all-purpose index of prices? While the proposition being examined rests on the premise that goods are themselves qualitative and quantitative constants, it definitely does not subscribe to any idea that particular types of goods are constant in value relationship to other types of goods.[7] The quantities of money required from time to time to buy bread or butter certainly do not vary directly with the quantities required from time to time to buy bricks or bombers—and no person or enterprise ever has to buy everything. The idea being considered here is not one of keeping pace with the purchasing power of money for all purposes. *It is one of converting original costs to current costs*—and original costs applied to limited, specific things, not to all things in general. As both a theoretical and a practical, usable concept, therefore, the "appropriateness" of indexes to be used for the contemplated purposes would have to rest on their construction as measurements of purchasing power in terms of only whatever it is that is purchased—inventories, machinery, buildings—all reflecting both material and labor. For utility, facility, and reasonable stability this requirement would, accordingly, seem to call for indexes based on classifications by type—but broad within the tolerances of reasonable homogeneity.

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[7] *As is discussed below, change in the standard of value in terms of price should be distinguished from change in value in terms of the relationships between different goods or services.*

Restatement of Original Cost Intended

In this connection, it should be thoroughly understood that the translation of actually expended costs to current cost levels through such use of price indexes is not of the same nature as those adjustments made in quasi-reorganization where depreciable capital assets are revalued or prevalued to some basis unrelated to cost. *The current cost level theory being explored here does not depart from original costs. It merely restates them in terms of current standards of money value*—and the use of price indexes as the basis of measurement is strictly a matter of optional procedural convenience.

As to what constitutes the current costs from which these indexes are to be constructed, it seems reasonable that, as in the case of inventories, they should be derived from or treated as the market replacement costs of all that enters into the asset to make it an asset. Note well again, however, that *replacement cost is here indicated, not at all because the assets will be replaced at these or at any other costs, but only because replacement cost is generally to be expected to offer a reasonably acceptable measurement of appropriate current cost—as well as a reasonably available means of measuring it.* Just as it is not the function of depreciation accounting to "recover" capital investment, neither is it to "replace" capital assets. The provision of funds with which to replace capital assets is a matter of financing largely controlled by the board of directors of a company and there is no need to consider questions as to whether assets will or will not be replaced, whether they will or will not be replaced by like assets, or the possible effects of technological change on replacement. Depreciation accounting deals with something that *is*—*now*—not with something that might be—maybe.

The Cost Recovery Illusion[8]

(In dealing with this phase of the subject, this otherwise happy contemplation would seem to be incomplete if some space were not taken to discuss, if not dispel, the illusion that money or capital is or can be "recovered"—fantastically—by the process of bookkeeping. Bookkeeping is simply what it purports to be, a re-

[8] *The next five paragraphs in parenthesis, digress to offer comments which relate to the subject in proportion to the reader's need for them.*

cording process, and not even when it aspires to the reportorial heights of accounting could it ever recover anything. Nevertheless the idea that it can and does seems to be so deeply widespread that there is real danger in the kind of thinking and resulting action which it tends to promote.[9]

("Recovery" as a theory seems to rest on the idea that, by going through the motions of charging a cost "against revenue," it, the cost, is thereby retrieved, regained, or otherwise brought back into the fold from which it had somehow got out. For some of the subscribers this seems, of itself, to be enough; but for others it is felt necessary that the idea be extended to a conclusion that the recovery of the cost is "effected" when a purchasing customer pays a price included in the revenue derived from the sale of the goods in respect of which the cost was presumed to have been incurred. Some even insist that the price has to yield a profit—although it is not made clear what is not recovered when price involves a loss. All of this, it is explained, is because price is the arithmetical, adding-machine product of cost.

(Karl Marx, too, said something like that—or meant to—when he conceived profit to be a sort of penalty superimposed on cost by piratical capitalists stealing from "the exploited classes." A little reflection—as a consumer-purchaser, if not as a seller—will, however, reveal that value in trade is not the outcome of unilateral decision. It still takes two to make a bargain, and, in business, the desire to sell is frequently stronger than the desire to buy. The buyer, it might be noted, buys for the buyer's benefit, not for the seller's. Cost (in its relationship to price) may, therefore, dictate when some action—manufacture, purchase, or sale—shall *not* be done; but it seldom dictates what *shall* be done. That is a function of price—not of cost—and price is the objective product of outside forces working to establish *value* in the market place.[10]

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[9] *It is realized that the word "recovery" is sometimes used in a specialized technical sense by a few experts who know the limitations of its meaning in that sense. These comments relate to the more prevalent usage of and belief in the word in its popular sense of "getting back."*

[10] *The term "price" is used here in the sense of an open-market valuation established in trade exchange under competitive conditions, as distinguished from the charges prescribed for regulated industries. It is also used in the sense of a freely functioning economic force and not in the sense of a mere tag (sometimes unrepresented by goods) as was the case under governmental price control during and after World War II.*

(Contradictiously, however, the "recovery" idea—that price *is* the product of cost—is most frequently advanced by those whose other words or actions recognize the fact that price is *not* the product of cost. Thus, in support of current desire that later higher costs be first "recovered," it is argued that original lower costs do not constitute appropriate charges against current revenues. Does this mean it is believed that current prices are based on current costs rather than original costs? On rising prices—perhaps; but on falling prices—certainly not. The motivating fear which underlies most of the general rationalizations regarding "lifo" or replacement-cost depreciation is that prices shall decline *below* costs, i.e. that prices shall *not* be based on costs—and thereby there is revealed the unknowing knowledge that free prices are not based on costs.

(Associated closely with the "recovery" idea is the other idea that the way to recognize "management's responsibility for replacement of depreciable assets" is to make "appropriations" from income or surplus—without equivalent "appropriations" from the cash drawer. Maybe such pencil action helps to remind the board of directors of one little part of what they have to know anyway; maybe it stalls off a dividend-hungry stockholder; maybe it even puts a small crimp in the high-cost-of-living demands of a militant labor union. But it is clearly an entry into fields outside the realm of accounting—and is not accounting.)

Recognition of Two Types of Price Change

As may already have been noted, this whole problem has all the elements of a chemical "chain reaction." One thing leads on to another in a manner which precludes conclusive brevity and promotes wonderment as to where it will end. No contemplation of the subject would, however, be constructively adequate unless it recognized the fact that for goods in trade there are two types of price change—one (which has so far provided the basis of consideration) being change in the value of money, and the other being change in the value of goods, such as might be brought about by change in the means of creating the goods or of making them available for sale. Thus, as a very hypothetical example in this latter instance, if there were to be marketed a brick-laying machine so appropriately priced in relation to its performance that, for the labor cost of five men, it would effectively produce the

output of ten men, then the market value of brick buildings would surely be affected. Should such technological progress be recognized in the index of change in building values? No—would say some who think in terms of depreciation as "*recovery* of the real investment committed to the asset" and of "the *general* purchasing power" of money. In the way this particular argument is being unilaterally conducted, these ideas are, however, being found unacceptable; and is it not a fact, that, as a practical matter, there can and need be no detailed knowledge as to whether price changes in particular classifications of goods represent changes in the standard of value or changes in value—whether they are caused by supply or demand affecting the goods, supply or demand affecting money, mass psychology (which covers a lot of things), political strategy, war or peace, new alternatives, technological change, or sunspots?

In the case of land there is no turnover—either by sale or by consumption and replacement—no exposure to "going-concern" loss and, customarily, no charging of its cost against operations. There is, therefore, no carry-over of costs from one period to another as a charge against future operations. There could, however, be argument that, at least to maintain consistency, recognition should be given to fluctuations in the investment in land as reflected from the going market. In very many instances there would, of course, be unusual difficulty in ascertaining the amount of the appropriate adjustments; but, provided this difficulty could be satisfactorily overcome, there would seem to be no particular reason why those who might wish to do so should not carry out the necessary accounting to report land at current value. In such unusual circumstances it would, however, seem advisable that original cost or the amount of the applicable change in price levels be disclosed, at least until such time as inevitable conflicts of practice might be substantially eliminated through time and experience.

Price Change Capital

In contemplating the methodology of using current cost levels as a basis of accounting, consideration has, of course, to be given not only to the adjustment of the asset costs but also, in the disciplinary compulsive of double-entry accounting (and thinking), to the per contra treatment of the adjustment. This calls, first, for

recollection of the stipulated condition that accounting is accounting for capital—not capital in a purely monetary sense, nor in a legal sense—but in an economic sense. The capital to be accounted for must, accordingly, be the capital contributed, plus or minus the capital gained or lost through business operation, *plus or minus the capital gained or lost as a result of change in price levels and money value*. Surely, if the investors of capital are to be expected to take the risk of having it wiped out or diminished through economic change (as distinguished from operational change), they are entitled to have an accounting for economic increment when it shall occur. Similarly, and conversely, if the entrusted managers of business capital are to be held accountable for the proceeds of economic increment, then so also are they entitled to be discharged of responsibility upon accounting for the effects of economic "loss." This does not mean that nothing can or should be done to take advantage of the ups or to guard against the downs. It means that while there may be protective insurance against *loss* from chance, there cannot be insurance against the *happening* of chance.

The adjustments arising from the reflection of assets to a basis of current cost levels would represent the measure of the extent to which change in the value of money through change in price levels had affected the stated amounts of capital attributable to other sources, such as owner contributions or profits retained. Such adjustments would, therefore, properly be treated as additions to or deductions from these other amounts of capital. This would call for the creation of a new account in the capital section which (for lack of a better descriptive title) might be termed a "price change" capital account.

Operation of the Price Change Capital Account

This price change capital account would be charged or credited with, respectively, the amount of decrease or increase in the market (replacement) cost of inventories and net capital assets.

In the case of inventories, this would involve nothing more than (a) appropriate adjustment of the inventoried costs, and (b) withdrawal from inventories at the adjusted costs. What goes in would be what comes out, and the gentle art of cost accounting could proceed on its way with little more than passing recognition of the fact that something was different.

ILLUSTRATION OF DEPRECIATION COMPUTED ON A CURRENT (REPLACEMENT) COST BASIS

Given: Asset with original cost of $100 to be amortized over 10 years

	Replacement cost of asset				*Depreciation reserve*			*Net asset*	*Price change capital*		
Year	*Debit*	*Credit*	*Balance*	*Depreciation amortization*	*Debit*	*Credit*	*Balance*	*balance*	*Debit*	*Credit*	*Balance*
1	$100		$100	$10		$10	$ 10	$90			
2		$10	90	9	$1	9	18	72	$10	$ 1	Dr. $ 9
3		10	80	8	2	8	24	56	10	2	" 17
4	10		90	9		9 + 3	36	54	3	10	" 10
5	10		100	10		10 + 4	50	50	4	10	" 4
6	10		110	11		11 + 5	66	44	5	10	Cr. 1
7	10		120	12		12 + 6	84	36	6	10	" 5
8	10		130	13		13 + 7	104	26	7	10	" 8
9	10		140	14		14 + 8	126	14	8	10	" 10
10	10		150	15		15 + 9	150	0	9	10	" 11

Total charge against operations.... $111

Balance remaining in price change capital account..... $11

EXHIBIT 1

In the case of capital assets the methodology would be only slightly more complicated. Thus, as illustrated in Exhibit 1, (1) the periodic changes in the current (replacement) costs of the assets would be carried per contra to the price change capital account, (2) the amortization charge for each period would be determined on the basis of the current asset costs for each same period, with the credit per contra carried to the reserve account, and (3) the accumulated balance of the reserve would be adjusted to the planned degree of amortization on the basis of the adjusted current (replacement) costs. In this way (a) periodic income would be charged only with the aliquot portion of the current asset (replacement) cost basis for the period, (b) the reserve would reflect the proper cumulative balance to adjust the net assets to the unallocated balance of current asset costs, and (c) the price change capital account would show the extent to which the *net* assets had been affected by change in price levels since original acquisition. Upon retirement of the assets, the asset and reserve balances would cancel each other out and the applicable balance in the price change capital account would remain there until such time, if ever, as it might be wiped out by contrary conditions or be disposed of by proper action of the board of directors.[11]

On a cumulative basis the balance in this price change capital account would, accordingly, represent the degree of change in price levels from the occurrence of original transactions at original cost (or time of adoption) to the time of determination. On a period basis, the change in the balance of the price change capital account would represent the degree of change from original cost or earlier replacement cost to current cost during the period.

In this connection, it might be noted that, with the passage of time, the balance in the price change capital account would not reflect amounts applicable only to the assets remaining as components in the financial position. There would, therefore, seem to be little point in maintaining perpetual reporting as to whether the sources of price change capital were inventories or capital assets. If, however, any need were to exist for such a segregation of the balance by nature of origin distinguished according to the assets reflected in the financial position this could probably best be done by showing original costs parenthetically at the respective assets.

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[11] *$11 in the example in Exhibit 1.*

PRO FORMA FINANCIAL STATEMENTS ILLUSTRATING USE OF A CURRENT (REPLACEMENT) COST BASIS

Results of Operations

Sales

Costs:
- Inventories brought forward from last period
- Materials, supplies, services purchased (cost)
- Wages, salaries, etc.
- Portion of current (replacement) cost of buildings, machinery, and equipment allocated to period
- Income tax
- Increase in price levels applicable to inventories during period (1) (2)

Deduct: Inventories carried forward to next period at current (replacement) cost

Costs allocated to period

Profit for period

Add: Profit employed in business at beginning of period

Deduct: Dividends paid during period

Profit employed in business at end of period

Financial Position

Current assets:
- Cash
- Receivables—trade
- Inventories—at current (replacement) cost

Deduct: Current liabilities
- Payables—trade
- Income tax

Net current assets

Deferred charges

Buildings, machinery and equipment—at current (replacement) cost
- Less: Accumulated amortization

Land—at (original) cost

Net assets

Source of net assets:
- (a) Capital stock
- (b) Profit employed in the business
- (c) Change in price levels
  - Balance beginning of year
  - Increase for year
    - Inventories (1) (3)
    - Buildings, machinery and equipment (net) (1) (3)
  - Balance end of year

Notes: (1) In the event of price level decline, price change adjustments treated here as additions would become deductions.
(2) An element of cost of goods sold.
(3) Analyses of these balances could be given to show particulars of change during period.

EXHIBIT 2

Some of these latter points may, perhaps, be made to appear clearer by reference to Exhibit 1. Thereafter, an illustration as to how a basis of current cost levels might be reflected in financial statements is shown, roughly, in Exhibit 2.

Accounting Change

"Accounting is utilitarian; . . . the determination of what is useful does not rest solely with the accounting profession and . . . the capacity of the profession to deal successfully with the problems that arise is necessarily dependent upon its ability to secure acceptance of its views by other parties interested."[12] In this problem which has now arisen, however, the matter—properly so—is not so much one of having the other parties accept the views of the accounting profession as having the profession consider the views of the other interested parties. This thought is, of course, contained in the quotation—as may be readily observed by interpolating "avoid rejection" for "secure acceptance."

At the same time, there is little room in accounting for personal idiom, and, as George D. Bailey has so aptly put it: "Accounting must be dominated by an orderly body of accounting thought consistently applied on the basis of objective information."[13] This, however, is not to be construed as a reason for resisting change. While change for the sake of change is to be decried, change for the sake of progress is to be encouraged. What is needed now, therefore, is not hasty pioneering action (although it apparently helps to stimulate thought), but well-considered exploration of the problem *in the light of all the changing conditions,* with a view to finding whether it leads to "an orderly body of accounting thought" and to early remedial action on a scale which would constitute "general acceptance."

In contemplating the possibilities of current cost levels as a basis for accounting it should, of course, be understood that the problem is not one of achieving now the definitive or the ultimate, but rather one of devising improvement over existing methods which, it is being impressively indicated, do not satisfactorily

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[12] *G. O. May in "A Restudy of the Concepts and Terminology of Business Income," The New York Certified Public Accountant, January 1948, p. 10.*

[13] *President, The American Institute of Accountants, in "The Increasing Significance of the Income Statement," The Journal of Accountancy, January 1948, p. 18.*

meet the requirements of the times.[14] It is not, furthermore, to be expected that any new accounting procedure could supersede an old without at least partially destroying something theretofore considered to be of value. In such instances, however, it is always well to reappraise value, for not only does it change with the changing times, but sometimes—even in accounting—it may have rested on fiction (or theory) inspired by the mere existence of something which was presumed to have value merely because it was a product of a system believed (or held out) to have value.

Providing Comparability with the Past

Among the more prominent of the "losses" which might be mourned in objection against the adoption of such a new basis would be the destruction, in whole or in part, of the value of historical precedent established on a different basis. This value is held to lie largely in the benefits to be derived from having a basis of comparability between the experiences of the present and those of the past—from having "bench marks" against which may be measured or appraised the significance or otherwise of current events. No such basis for proper comparabilty or measurement has, however, existed or can exist in accounting results determined on a monetary basis of original costs which fails to recognize change in the value of the monetary unit. The very existence of the current search for change which is the subject of this paper is, in fact, caused to a large extent by a greater realization that the past was different from the present, and that the two cannot be properly compared on fluctuating bases of inconsistent monetary values. Far from destroying comparability with the past, the change being contemplated here would, for the first time, provide it.

With any such change there would, of course, be an immediate loss of comparability, not so much as to the past within one concern, but as to the different present as represented by those other concerns not making the change at the same time. Comparability —with both past and present—is, however, already being impaired

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[14] *See, for example, releases of data on National Income by U. S. Department of Commerce, in which "profits" representing increases in inventory valuation are eliminated, and financial reports of companies in which extraordinary charges are made against operations to cover wear and exhaustion of facilities on the basis of their current replacement costs.*

by "fifo-lifo" conflicts and a slightly higher degree of temporary confusion would be a small price to pay for progress.

In general, therefore, it would seem reasonably adequate to note the timing of the change (as is the usual practice upon adoption of "lifo"), to give an explanation of the practice being followed, and to let history, in the usual way, develop with the passage of time. In due course—if the procedure were found to be useful—there would then emerge more general acceptance and more general practice. The actions of different times in the past would then be resolved in approximations of equality as of one time in the present and comparability as between different businesses would then attain levels not possible under present methods.

For those who feel this matter of continuity sufficiently important, the data for retroactive restatement to the new basis could, of course, be obtained, or accounting on the old basis could also be continued until the need for it would evaporate. This thought, however, should not be construed to constitute support for any idea of *alternative* bases of accounting. Already there is too much confusion as to what accounting is or does; and accounting must make up its mind in the near future whether it is primarily a matter of historical monetary arithmetic or of constructive business economics. Today it is loosely afloat in the limbo between these two concepts. Certainly if it is to be of maximum utility in its contribution to social progress, accounting cannot afford to ignore the fact that the evidence is here now that it is being found wanting, and that, in expert professional opinion upon financial statements, the "exception" that certain management action is "not in accordance with accepted principles of accounting" may find approval as a sign of business prudence or acumen rather than disapproval as a crime against the conventions.

Income Tax Aspects — A Quick Look

This paper does not attempt to discuss the income tax aspects of the problem because it is already long, because others can better develop this phase of the subject, but, largely, because income tax officialdom (rightly so) has not traditionally attempted to dictate how income shall be determined—but has accepted, and perhaps taken advantage of, the precepts already established by those

most directly affected. Despite the great importance of taxation, accounting change must come first. Nevertheless, brief attention might be drawn, in passing, to the necessity which there would be for consistency in the application of such a current money theory for income tax purposes. Thus, for example, if, over the term of its economic life, the current cost of a capital asset were to decline below its original cost and thereby produce depreciation charges aggregating less than original cost, this result would have to be accepted in the same spirit of justice which would undoubtedly prevail if the current asset value were to increase over original cost and thereby produce charges in excess of that cost.

Other things being constant, adoption for income tax purposes of such a current money basis would have the relative effect of reducing taxes in periods of rising prices and increasing them in periods of falling prices. In this field, however, other things are never constant, and it would not only be natural but almost inevitable that changes in the concept of what constitutes income would be accompanied by changes at least in tax rates. Tax collection has become largely a matter of "getting it when the getting is good" and, to a large extent, that delicacy of timing has been indicated by profits as determinable in accordance with accepted accounting practice. Any opinions that adoption of a current cost level basis for the determination of income would necessarily produce certain effects upon tax collections are, accordingly, to be considered more in the nature of guesses subject to all the usual hazards of fiscal practice and political expediency. Certainly the change would call for careful revision of income tax laws—not the least of which would be those sections dealing with the carry-back or carry-forward of losses. As may eventually be found out if prices go back down to former lower levels, taxes may have taken away more than was "earned," and the effect will, accordingly, have been a taxation of capital. The deleterious results of such a process, if it were to occur on a large scale, could well be nationally disastrous.

While touching on the matter of income taxes it might be of interest to note the recent Tax Court decision nullifying the Commissioner's regulations requiring "lifo" users to observe a *physical* matching of opening and closing inventories. The court's ruling held that even although a physical matching may be possible, it is

not necessary. *A matching of monetary values is valid.*[15] The decision marks, therefore, a further movement away from the idea of physical identities towards the idea of investment and seems likely to portend greater acceleration in that direction.

Minimizing Subjective Considerations

On this matter of speculating about the future of price levels there frequently is a natural tendency among those feeling the impact of change to convince themselves, or others, that "things will never again be what they used to be." And—thank goodness—that is sometimes true. In the field of price levels, however, nothing of the future can be known, even although there might be evidence to indicate the possibility of a secular or long-term permanent trend in the gradually declining value of money. Within the cyclical short term there are problems which have to be solved so that there can be continued existence to enjoy the long term. There would, accordingly, seem to be little need to consider whether prices might or might not come back to old levels. Prophecy is an art separate and distinct from accounting. For present purposes it is sufficient to know that the future is neither known or knowable, but that price levels *do* change.

It would, furthermore, seem to be in conformity with the direction of accounting evolution to move away from a greater degree of personal judgment based on subjective factors (such as costs artfully constructed by the addition of monetary amounts having different values at different times according to the peculiarly internal design or accident of their incidence) towards a lesser degree of personal judgment based on more objective factors (such as market replacement costs constructed by the addition of monetary amounts having the same value as of the same time and a "free" relationship to each other according to the more external circumstances of that one time).

On this point, it might be brought out that the most objective criterion of value in business is that established by the overt act of exchange for a *price*. Price, as squeezed out under the impact of the forces of the market place, is, as somebody aptly termed it, "the thermostat" of business—the thing that makes things happen

[15] *Edgar A. Basse, 10 T.C. No. 41.*

—that dictates whether this shall be made, or whether that shall not be made—that directs the flow of goods from those who have to those who have not, but want. And in its role as such a criterion of value, price is objective—beyond personal whim or caprice, beyond arbitrariness or suspicion. It offers, therefore, an eminently satisfactory basis for further development of the pattern of the art of accounting.

Not the least attractive of the features of a current money basis would be its effect of consistently placing the two important types of deferred costs—inventories and capital assets—in a relationship in time on one common plane of one current cost level. In this way, there would be constantly reflected in the accounts the time to time relationships established by the going market between those two property types; and there would thus be permitted the wholly natural and proper mode of thinking which attempts to appraise things in comparison with, or in contrast to, other things as of one and the same time.

Bettering Public Understanding of Business

As to the effects upon general understanding of business affairs, financial statements, or private capital enterprise, it seems possible that the change would more likely be helpful than harmful. General understanding is, of course, at such a low level that there would be little exposure to loss; but the need for improved understanding is becoming so great that anything which will help to bring it about has merit for that reason alone. The price change adjustment of capital would not be an easy concept for the layman. But, then, the whole range of "the surpluses" has always been a mystery for any but the initiated. On the other hand, the presentation of inventories and capital assets at current (replacement) cost levels would seem to be reasonably understandable. It would provide not only the advantage of uniformity of practice upon one plane of comparison, but also an enjoyable freedom from such alphabetical persiflage as "fifo, lifo, hifo, or nifo."

Further in this connection, the need for greater understanding has been recently demonstrated in labor union attacks on business profits and in congressional inquiries into price increases. In some of these instances it seems possible, of course, that the action was designed more to obtain certain public reaction than it was to solve

the underlying problems; but, on the whole, it seems evident that there is need for better understanding. In many respects, however, business has been handicappd in its attempts to further that understanding by the difficulty of explaining the nature of profits as determined by conventional accounting in an inflation economy. This may be observed in many public statements about "the high cost of corporate living," "paper" or "inventory" profits, "fictitious" operating results, etc., or in a number of actions to create special reserves, to adopt modifications in inventory accounting or to charge off extraordinary depreciation of capital assets.[16]

In more technical detail, differences of opinion have emerged as to whether profits should be measured in a relationship to sales or to invested capital. The proper answer is, of course, that they can be measured in relation to either or both of these bases. But because of changed relationships of sales volume to invested capital as shown by conventional financial statements, profits tend to be minimized in appearance by the one method and maximized by the other. Each, therefore, has its proponents according to the result desired. The major difficulty here, it will be observed, is that the profits are stated in terms of more current money while the invested capital is stated in terms of earlier costs which have no current significance for the purpose and are misleading *in terms of current money values.* Change to a basis of current cost levels would, accordingly, provide at least one means whereby some opinion differences might be more beneficially resolved. Even more important than that, however, it would bring out from its present obscurity the true facts regarding that most important guide to managerial and investment policy—the rate of return on capital as determined in terms of current money values.

In a similar vein, it will be readily understood that all of the conventional ratios used for analysis or interpretation of financial statements are defective and probably misleading to whatever extent they rest on comparisons between figures which are not based on homogeneous standards of measurement. Thus, for example, of the fourteen ratios selected by Dun & Bradstreet for its periodi-

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[16] *See, for example, annual reports for 1947 of companies such as Bethlehem Steel Corp., Chrysler Corp., E. I. du Pont de Nemours, General Motors Corp., Phillips Petroleum Co., Sun Oil Co., U. S. Steel Corp., Westinghouse Electric Corp., and others.*

cal surveys of business, thirteen would have to be interpreted with some degree of suspicion.[17]

Possible Economic Consequences

Any such change as is here contemplated would unquestionably have effects upon business policy decisions, and would, therefore, have economic, political, and social consequences. These phases of the subject offer attractive material for separate treatment and it is hoped that others will be unable to resist the lure. In the meantime it might be observed that the current cost level basis would not only overcome the balance-sheet defect in "lifo" inventory accounting, but would also eliminate the unpleasantness which occurs when "lifo" inventories decline—technically, even for a moment—below their opening or base balance. At that point, if the theory were consistently maintained, low first-in costs become the costs of goods sold and later replacements are inventoried at the replacement costs. To such extent the beautiful purpose of "lifo" would, accordingly, be defeated—unless, as has been known, business policy were to become the victim of its own accounting petard and prescribe the acquisition of unneeded inventory to preserve a "more advantageous" inventory case.[18]

On the broader significance of the change as a factor in economic, political, and social affairs, it seems probable that the major consequences would be those derivable from the reporting of relatively lower profits in times of rising prices and of relatively higher profits in time of falling prices. In general, profits, prices, product volume, and employment tend to move on approximately similar time cycles, and it appears possible that the change could

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[17] *Described in the sometimes obnoxious vernacular of the trade: (1) current assets to current debt, (2) profit to sales, (3) profit to net worth, (4) profit to net working capital, (5) turnover of tangible net worth, (6) turnover of net working capital, (7) sales to inventory, (8) fixed assets to tangible net worth, (9) current debt to tangible net worth, (10) total debt to tangible net worth, (11) inventory to net working capital, (12) current debt to inventory, and (13) funded debt to net working capital.*

[18] *It might be noted here that when involuntary liquidation of inventory occurred as a result of conditions during World War II special adjustment of net income and resulting tax was permitted under tax law amendment to provide some relief against the consequences of inability to replace inventories. (I.R.C. Section 22 (d)(6) added by 1942 Act, and amended by 1943 Act.) Other than for tax purposes it seems possible that when "lifo" users become subject to inventory losses through falling prices there will evolve a fairly general adoption of reserves to cover the difference between base stock costs and market prices.*

have appreciable effect on those human reactions which tend to develop thought patterns in mass psychology which, in turn, by their moving to disturbing extremes, alter—or perhaps even largely create—the business cycle. In such event, it would not seem too farfetched to believe that the change could contribute towards a leveling of the cyclical fluctuations and thereby aid in the striving towards a more stabilized economy in which there shall be a greater degree of that security which is now so much sought after.

In all of this contemplation, it should, of course, be appreciated that in times of stable prices it would not, as a practical matter, be necessary to recognize relatively immaterial changes in price levels, and that in such times the changes in technique considered here would not have to come into play until they were required by material disturbance of the stability.

Relationship of Proposal to Accepted Principles

As to the nature of the change under contemplation it might be observed that the use of appraisals, though no longer as popular as formerly, is deemed to be fully in accord with accepted principles of accounting. Those who have had occasion to work with foreign exchange consolidations will also be familiar with the idea of translating asset costs to a basis of current money levels. And, as has been observed, "lifo" goes a long way towards the idea of a current cost level basis. There appear, therefore, to be some grounds for a case that accounting on a basis of current money values *is* reconcilable with generally accepted practices. Nevertheless, in the writing of this paper it has been thought better to deal with the idea as something different—though not necessarily "radical"—in order to avoid the kind of "backing into" change which has somtimes occurred in the past history of accounting. The end results may be the same, but the desirable understanding of basic fundamentals and objectives will be missing unless the subject is considered without letting the helpful knowledge of the past unduly obscure the path to the future.

In the method of presenting this paper the approach has also been deliberately made from a viewpoint which seeks to preserve the integrity of the balance sheet while making the income statement also serve its purpose effectively. In recent times income determination has properly emerged as a matter of much greater significance than it was formerly, but there would seem to be no

need to swing to extremes which would fail to recognize that the balance sheet still serves a number of useful purposes and that periodical income must be reconcilable with change in capital over the period. Evidence of these extremes is apparent in "lifo" applications which so avidly attempt to achieve desired income results that they destroy the value of the balance sheet. It is also even more apparent in some current novelties of treatment which seem to maintain that, inasmuch as the current value of capital assets as indicated by their replacement costs is rising above original costs, their "book values" should be reduced more and faster by additional charges for their amortization.

Emergence of "Economic Accounting"

On the conditions which underlie this discussion the adoption of what might be termed economic accounting on a basis of current cost levels would appear to offer the possibility of significant new opportunity for accounting to become of even greater importance in aid to business enterprise and, therefore, to social progress. Not only would it satisfy the requirements set out at the beginning of this paper, but it would also move towards an increasingly desirable coordinaton of financial accounting, economics, national statistics (which are having an increasingly important influence upon national fiscal policy) and—not least—valuation (another art from which accounting has been too glib in claiming divorcement in the face of increasing association by businessmen and the general public).

More and more it is being realized that, while each individual business may for some purposes be considered to be a separate entity, it is for economic purposes a component unit of the national —or even the international—production and distribution system. As such, each unit has a part to play in making that system work effectively; and if accounting can help to bring that about then it will truly have become a most constructive force from the standpoint of society as a whole.

As to where the adoption of change might lead—who can tell? The test of today's accounting is that it shall serve a useful purpose for today's society, and the distant dimness of an attractively unknowable future should not, of itself, deter satisfying action while the need is being felt. In our brief span we can only hope to help the present move along towards the future.